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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,498	08/28/2003	Angelo J. Suitor	58811US002	6967
32692 7590 04/08/2008 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
EXAMINER LAMB, BRENDA A				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
04/08/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com
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Office Action Summary

Application No.

10/650,498

Applicant(s)

SUITOR ET AL.

Examiner

Brenda A. Lamb

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/15/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-8, 17, 18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 17, 18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/2008 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,2,4,8,17,18, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Cox, Jr (US 3,007,608) and Stash et al (6,001,425).

Ruuttu et al teach an apparatus for coating a workpiece with a coating solution

comprising a coating chamber in which the workpiece is coated, a coating solution supply container for supplying the coating solution to the coating chamber, a fluid connection fluidly connecting the coating chamber and the coating solution supply container such that coating solution is flowable or capable of flowing between the coating chamber and the coating solution supply container as depicted by the arrows in Figure 4 wherein the container is positionable to different elevations allowing coating solution to flow from the supply container to the coating chamber and vice versa, from the coating chamber back to the supply container. Ruuttu et al fail to teach the use of a deformable or collapsible bladder type coating solution supply container.

Cox, Jr teaches the design of a dispensing system which includes a removable deformable or collapsible supply container arranged in a support tank or carton that dispenses the liquid directly through the hose. Cox, Jr teaches at column 4 lines 44-58 that smooth or laminar flow occurs through the hose which acts as pouring spout to dispense liquid therefrom since Cox, Jr teaches the bag collapses as liquid is withdrawn and no gains from air admission occurs which would disturb the steady dispensing flow. Cox, Jr teaches tipping or tilting the removable deformable or collapsible supply container arranged in a support tank or carton to dispense the liquid therefrom (see column 6 lines 58-70). Cox, Jr fails to teach that liquid flows back into the deformable coating solution supply container.

Therefore, it would have been obvious to modify the Ruuttu et al by substituting its supply tank assembly with a deformable or collapsible bladder dispensing supply system such as taught by Cox, Jr for the taught advantage of such a supply tank

assembly— smooth or laminar flow through the dispensing hose. Further, it would have been obvious given the modifications of the Ruutuu et al apparatus to substitute the chamber surrounding the Cox collapsible bag or plasma bag with a chamber which is in communication with a vacuum source such that fluid can flow back into the deformable coating solution supply container due the increased void volume in the collapsible bag as the walls of the collapsible bag are pulled outwardly by the vacuum in the chamber and the increase in void volume within the bag creates a vacuum in the bag such that fluid flows back into the collapsible bag since Stash et al teaches enclosing a collapsible bag or plasma bag in a chamber which is selectively in communication with a vacuum source in order to promote flow of the fluid, which is external to the chamber having collapsible bag or plasma bag enclosed therein, back to within the deformable coating solution supply container or collapsible bag or plasma bag for the obvious reason to enable to recycle the coating or fluid within the apparatus.

With respect to claims 2 and 18, the deformable or collapsible bladder type system as set forth by Cox, Jr is deemed to be capable of being manually manipulated because the supply system is flexible and non-rigid so as to be collapsible. With respect to claims 4 and 20, the Ruutuu et al apparatus as defined by the combination above results in an apparatus having a supply system mounted for movement between an upper and lower elevation. With respect to claims 8 and 24, the Ruutuu et al apparatus includes a valving mechanism (15) that enables coating fluid to flow from the coating chamber back in the direction to the deformable coating solution supply container.

Claims 5, 7, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Cox, Jr (US 3,007,608), Stash et al (6,001,425) and Cranskens et al (US 3,296,951).

The teachings of Ruuttu et al, Cox, Jr and Stash et al are applied for the reasons noted above. Neither Ruuttu et al or Cox, Jr or Stash et al teach or suggest a mechanism (i.e., plate) for deforming the supply container or bag to move the coating material to the coating chamber and which permits coating material to flow back to the coating supply container or bag. However, it was known in the art, at the time the invention was made, to use a plate to apply pressure to a collapsible or deformable supply bag to supply coating material to a coating chamber and the release of the plate to relieve pressure to facilitate the coating material to flow back into the coating material supply bag as evidenced by Cranskens et al (US 3,296,951). In light of the teachings of Cranskens, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, a pressure supply/release plate in communication with the plasma bag in the Ruuttu coating apparatus as modified in the manner as discussed above in order to enable supply and removal of coating from material from the coating chamber.

Claims 5-7 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Cox, Jr (US 3,007,608) and Takeuchi (US 5,882,735).

The teachings of Ruuttu et al, Cox, Jr and Stash et al are applied for the reasons noted above. Neither Ruuttu et al or Cox et al or Stash et al teach or suggest a mechanism that deforms the coating solution supply container to provide a motive force

to move the solution between the coating chamber and the supply container for deforming the supply container or bag to move the coating material to the coating chamber and which permits coating material to flow back to the coating supply container or bag. However, it was known in the art, at the time the invention was made, to use a plate to apply pressure to a collapsible or deformable supply bag such as taught by Takeuchi to supply coating material to a coating applicator and obviously the release of the plate to relieve pressure to enable coating material to flow back into the coating material supply bag as shown in Figure 3A-3B. Alternatively, at the time the invention was made, to apply fluid pressure to a collapsible or deformable supply bag arranged in a holding chamber to supply coating material to a coating applicator and obviously the release of such fluid pressure would enable coating material to flow back into the coating material supply bag as shown by Takeuchi in Figure 2A-2B. Therefore, in light of the teachings of Takeuchi, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, a pressure supply/release plate in communication with the plasma bag in the Ruuttu coating apparatus as modified in the manner as discussed above in order to facilitate supply and removal of coating from material from the coating chamber. Alternatively, in light of the teachings of Takeuchi, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, arrange the plasma bag in the Ruuttu coating apparatus as modified in a holding chamber which is in selectively communication with a fluid pressure the manner as discussed above in order to enable supply and removal of coating from material from the coating chamber.

Applicant's arguments filed 1/15/2008 and 9/13/2007 have been fully considered but they are not persuasive.

Applicant's argument that Cox et al fails to teach that the fluid flows back into its plastic liner bag is found to be non-persuasive. As discussed above, it would have been obvious given the modifications of the Ruutuu et al apparatus to substitute the chamber surrounding the Cox collapsible bag or plasma bag with a chamber which is in communication with a vacuum source such that fluid can flow back into the deformable coating solution supply container due the increased void volume in the collapsible bag as the walls of the collapsible bag are pulled outwardly by the vacuum in the chamber and the increase in void volume within the bag creates a vacuum in the bag such that fluid flows back into the collapsible bag since Stash et al teaches enclosing a collapsible bag or plasma bag in a chamber which is selectively in communication with a vacuum source in order to promote flow of the fluid, which is external to the chamber having collapsible bag or plasma bag enclosed therein, back to within the deformable coating solution supply container or collapsible bag or plasma bag for the obvious reason to enable to recycle the coating or fluid within the apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday with alternate Wednesdays and Fridays off,

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb
Primary Examiner
Art Unit 1792

/Brenda A Lamb/

Primary Examiner, Art Unit 1792